IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1-2. (Canceled)

3. (Previously Presented) A data multiplexing method for a data multiplexer performing time division multiplexing of a plurality of bit streams, said method comprising the steps of:

extracting access unit information necessary for multiplexing processing from each of said plurality of bit streams;

calculating a time division multiplexing cycle for each of said plurality of bit streams, such that a separator separates multiplexed data by a specified method on the basis of said information extracted by processing at said extracting step,

wherein the calculating step calculates the time division multiplexing cycle irrespective of the transport rate of said plurality of bit streams,

performing time division multiplexing of said plurality of bit streams on the basis of a result calculated by processing at said calculating step; and

a second calculating step for calculating a data occupancy rate of a virtual data buffer of said separator,

wherein said multiplexing determines an order in which said plurality of bit streams are multiplexed on the basis of the data occupancy rate of said virtual data buffer calculated by the second calculating step.

4. (Previously Presented) A program for a data multiplexer performing time division multiplexing of a bit stream, which is recorded on a recording medium readable by a computer, said program comprising the steps of:

extracting access unit information necessary for multiplexing processing from each of said plurality of bit streams;

calculating a time division multiplexing cycle for each of said plurality of bit streams, such that a separator separates multiplexed data by a specified method on the basis of said information extracted by processing at said extracting step,

wherein the calculating step calculates the time division multiplexing cycle irrespective of the transport rate of said plurality of bit streams,

performing time division multiplexing of said plurality of bit streams on the basis of a result calculated by processing at said calculating step; and

a second calculating step for calculating a data occupancy rate of a virtual data buffer of said separator,

wherein said multiplexing determines an order in which said plurality of bit streams are multiplexed on the basis of the data occupancy rate of said virtual data buffer calculated by the second calculating step.

5-10. (Canceled)

11. (Previously Presented) The data multiplexing method as claimed in claim 3, further comprising the steps of:

generating schedule information from a multiplexing scheduler means by using said access unit information.